

## **REMARKS/ARGUMENTS**

### **(1) Summary of Office Action**

In the Office Action dated October 23, 2006, the Examiner indicated that the previous response to office action dated July 7, 2006 was not fully responsive because there were no claims drawn to original presentation. In the previous response, the originally-filed claims 1 to 22 directed to compositions were cancelled and new method claims 23 to 48 were added to the case.

### **(2) Claim Amendments**

The applicant has now cancelled the method claims 23 to 48 and added new claims 49 to 69 which are directed to orally administrable antimicrobial compositions. The limitations recited in the newly added claims 49 to 69 correspond substantially to those of the originally-filed (now cancelled) claims 1 to 22.

#### **Claim 49**

New claim 49 is an independent claim directed toward an orally administrable antimicrobial composition for suppressing the growth of enteric pathogens in the gut of livestock. The claimed antimicrobial composition includes (a) a cell wall lysing substance or its salt; (b) at least one of dried egg powder and albumen; and (c) a sequestering agent.

The applicant respectfully submits that new claim 49 is patentable over the prior art references cited by the Examiner, whether taken alone or in combination. In particular, the combined teachings of the prior art references neither teach nor suggest the claimed orally administrable antimicrobial composition.

The applicant further wishes to bring to the Examiner's attention the following comments in respect of the prior art references.

#### **European Patent Application No. 0 466 244 of Unilever NV**

Unilever teaches a mixture of cell wall lysing substance such as lysozyme, an antimicrobial such as the bacteriocin nisin and citric acid or a salt thereof. Regarding practical uses for this mixture, Unilever states the following on page 1 lines, 1 to 13:

"The present invention relates to improving the suppression of growth of micro-organisms in various products and/or safety of such products, in particular to improvements in combating contamination with *Listeria* bacteria. More particularly, it relates to

- a composition having improved antibacterial properties, suitable for combating microbial, in particular bacterial, composition of various products;
- the use of such composition
  - in a process for improving the suppression of growth of micro-organisms in various products and/or the safety of such products;
  - in a process for treating equipment for handling or processing food products, animal feedstuffs, cosmetic products, or pharmaceutical products, by contacting the equipment with such a composition; and
  - in a process for improving the safety of packed products by contacting at least part of the packaging material with such a composition..." [underline added for emphasis]

and on page 3, lines 47 to 50:

"The main application for this invention is in connection with the production, packaging and storage of food products and the cleaning of equipment used therefor, but the invention can be applied for non-food uses, examples of which comprise animal feedstuffs, cosmetic products, and pharmaceutical products and their production."

Unilever teaches using the composition to combat contamination with *Listeria* bacteria in products including animal feedstuffs. The reference further describes a process for treating equipment for handling or processing animal feedstuffs which involves contacting the equipment with such a composition. It is important to note that, in contrast to the claimed invention, the composition of Unilever targets the suppression of bacterial growth in products not livestock. Unilever neither mentions nor suggests that its composition is orally administrable to livestock to suppress the growth of enteric pathogens in the gut of livestock.

#### **European Patent Application No. 0 955 061 of Medipharm**

Medipharm discloses an oral product for the prevention and therapy of porcine gastrointestinal infections containing antibodies to specific viruses and bacteria, obtained from egg yolks of immunized hens. However, the oral product of Medipharm does not include a cell wall lysing substance or its salt, and a sequestering agent as recited in claim 49.

The applicant respectfully submits that there is no motivation for a person skilled in the art to take the composition described in Unilever (used to suppress bacterial growth on

the surfaces of products or equipment) combine it with the oral product of Medipharm to obtain the claimed orally administrable antimicrobial combination.

### **Claims 50 - 67**

New claims 50 - 67 ultimately depend from claim 49 and are directed toward various features of the claimed orally administrable antimicrobial composition. Insofar as claim 49 is presently allowable over the cited prior art, the applicant respectfully submits that claims 50 - 67 are also allowable.

### **Claim 68**

New claim 68 is an independent claim directed toward an orally administrable antimicrobial composition for treating gastrointestinal infections in livestock. The claimed orally administrable antimicrobial composition includes (a) a cell wall lysing substance or its salt; (b) at least one of dried egg powder and albumen; and (c) a sequestering agent.

The applicant respectfully submits that new claim 68 is patentable over the prior art references cited by the Examiner, whether taken alone or in combination. In particular, the combined teachings of the prior art references neither teach nor suggest the claimed orally administrable antimicrobial composition for treating gastrointestinal infections in livestock. In this regard, the applicant respectfully requests the Examiner consider the comments provided by the applicant relating to the Unilever and Medipharm references.

### **Claims 69**

New claim 69 depends from claim 68 and is directed toward an additional feature of the claimed orally administrable antimicrobial composition. Insofar as claim 68 is presently allowable over the cited prior art, the applicant respectfully submits that claim 69 is also allowable.

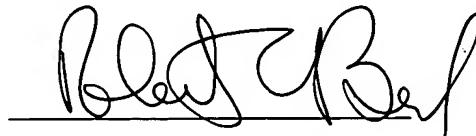
### **(3) Conclusion**

The present amendment imports no new subject matter into the application.

Consideration of the above-identified application is respectfully requested. If after reviewing this amendment, the Examiner believes that a telephone or personal interview would facilitate the resolution of any remaining matters, the undersigned attorney may be contacted at the number set forth herein below.

Respectfully submitted,  
NEOVA TECHNOLOGIES, INC.  
By its attorneys:

Date: 11/21/06

A handwritten signature in black ink, appearing to read "Robert C. Beck", written over a horizontal line.

Robert C. Beck  
Registration No. 28,184  
Beck & Tysver, P.L.L.C.  
2900 Thomas Ave., #100  
Minneapolis, MN 55416  
Telephone: (612) 915-9635  
Fax: (612) 915-9637